

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



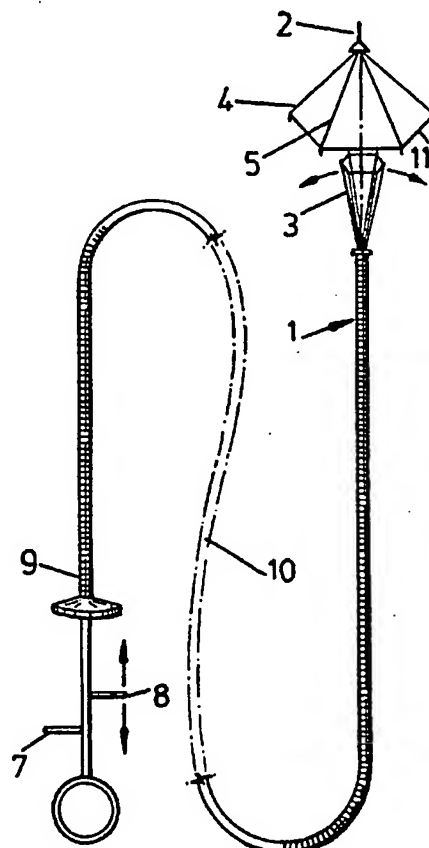
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61B 17/39, 17/22, 17/32	A3	(11) International Publication Number: WO 95/02371 (43) International Publication Date: 26 January 1995 (26.01.95)
(21) International Application Number: PCT/GB94/01537 (22) International Filing Date: 15 July 1994 (15.07.94) (30) Priority Data: 9314641.3 15 July 1993 (15.07.93) GB (71)(72) Applicant and Inventor: SALIM, Aws, Shakir, Mustafa [IQ/GB]; 2 Dene Walk, Bishopbriggs, Glasgow G64 1LQ (GB). (74) Agents: McCALLUM, William, Potter et al.; Cruikshank & Fairweather, 19 Royal Exchange Square, Glasgow G1 3AE (GB).	(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD). Published With international search report. (88) Date of receipt of the international search report: 9 March 1995 (09.03.95)	

(54) Title: RECTAL AND RECTOSIGMOID CANCER TUNNELLING UMBRELLA

(57) Abstract

The present invention provides a diathermy tunnelling umbrella device usable via the biopsy channel of an endoscope or through a proctoscope or a rigid sigmoidoscope. The device has remotely operable first and second opposed collapsible umbrella means with a diathermic distal end cutting and coagulating tip. A plurality of spaced apart diathermic cutting and coagulating spokes of the first umbrella means extend rearwardly from the tip towards the second umbrella means. The second umbrella means has a plurality of spaced apart diathermic cutting and coagulating spokes extending forwardly towards the first umbrella means. In use the device tip is advanced by diathermic cutting therewith into a growth with the umbrella means in substantially collapsed condition, at least one of the umbrella means is opened out by diathermic cutting of the spokes thereof generally radially outwardly into the growth, and the umbrella means manipulated by rotation and/or upward and downward movements for further diathermic cutting into said growth.



**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CC	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 94/01537

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 A61B17/39 A61B17/22 A61B17/32

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US,A,5 154 724 (ANDREWS) 13 October 1992 see abstract; figure 11 ---	1
A	US,A,4 976 711 (PARINS) 11 December 1990 see column 7, paragraph 2; figures 6,8,9 ---	1
A	US,A,3 874 388 (KING) 1 April 1975 see abstract; figure 9F ---	1
A	EP,A,0 189 329 (FISCHELL) 30 July 1986 -----	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex:

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

14 December 1994

Date of mailing of the international search report

23.12.94

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 LV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Barton, S

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB94/01537

**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 11  
because they relate to subject matter not required to be searched by this Authority, namely:  
see Rule 39.1 (1v) PCT
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

**PCT/GB 94/01537**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-5154724	13-10-92	NONE	
US-A-4976711	11-12-90	US-A- 5078717	07-01-92
		US-A- 5057107	15-10-91
		US-A- 5125928	30-06-92
US-A-3874388	01-04-75	NONE	
EP-A-0189329	30-07-86	NONE	